Georgia DOT Bridge No. 321-00297X-00255N County Road 297 Spanning Swift Creek Warwick Vicinity Worth County Georgia HAER NO. GA- 97

HAER

GA

161-WAR.V,

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Southeast Region
Department of the Interior
Atlanta, Georgia 30303

HISTORIC AMERICAN ENGINEERING RECORD

Georgia DOT Bridge No. 321-00297X-00255N

HAER GA 161-WAR.V,

HAER No. GA-97

Location:

County Road 297 spanning Swift Creek 2

miles northeast of Warwick, Worth

County, Georgia

U.S.G.S. Warwick Quadrangle (7.5),

Zone 17

Universal Transverse Mercator

Coordinates:

Northing 3525980 Easting 227100

Date of Construction:

1926

Engineers/Builder:

Designed and constructed by Worth

County, Georgia.

Present Owner:

Worth County

Sylvester, Georgia

Present Use:

Vehicular bridge to be demolished 1998.

Significance:

Georgia DOT Bridge No. 321-00297X-00255N is a Warren Pony Truss type bridge that was constructed in 1926. This bridge is one of only 22 Warren Pony Truss type bridges still extant in the state, and the only remaining one of its kind in Worth County. It is significant for its design and workmanship, and for its role in the development of transportation in

Worth County.

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Date:

January 1998

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Georgia DOT Bridge No. 321-00297X-00255N is a 1926 Warren Pony Truss type bridge with verticals. It is a steel structure with a concrete deck and concrete abutments. The substructure is comprised of concrete piers with spread footings. The bridge contains one truss span and two other spans, and measures 130' in length x 13'-1/2" in width. The length of the truss span is 69 feet. Typical of most early-twentieth century truss bridges, Georgia DOT Bridge No. 321-00297X-00255N possesses rigid connections, as opposed to the flexible pin connections, which were popular during the preceding century.

Georgia DOT Bridge No. 321-00297X-00255N is located on County Road 297 spanning Swift Creek. This crossing is located at the county line dividing Worth and Crisp Counties. The nearest community is Warwick, Georgia, which is in Worth County, and is located approximately two miles southwest of the bridge. County Road 297 is an unimproved roadway located in a rural area characterized by primarily farm land with scattered residential development.

The construction of Georgia DOT Bridge No. 321-00297X-00255N came about as the result of a joint decision by the county commissioners from Worth and Crisp Counties in 1924 to replace the existing bridge over Swift Creek, known as the "Smoak Bridge" (1). Upon the receipt of several bids, the contract was awarded to Worth County, who completed the bridge in 1926. The bridge was constructed according to specifications furnished by the State Highway Department (2).

Truss bridges are an American invention that were first developed during the late eighteenth century, but experienced their greatest period of popularity beginning after the Civil War through the late 1920s. The earliest truss bridges were constructed of wood, followed by cast iron, and later, wrought iron. The popularity of metal in the construction of bridges contributed to the establishment and growth of companies that specialized in the manufacture and erection of truss bridges. Many of these early companies were established as joint ventures by iron foundries and bridge builders. By mid-nineteenth century, technological advances in building materials made steel readily available and affordable, such that most truss bridges constructed after 1890 were made of steel (3).

The use of steel in the construction of truss bridges further revolutionized the bridge industry as standardized parts for truss bridges could be easily manufactured and obtained. Most bridge companies no longer manufactured their own parts, but began buying them from the larger steel mills. Georgia DOT Bridge No. 321-00297X-00255N HAER No. GA-97 Page 3

By the turn-of-the-century, the construction of truss bridges was largely undertaken by several large national companies that operated out of regional offices. One such company was the American Bridge Company, that was formed in 1902 as a result of the acquisition and consolidation of 35 smaller bridge companies by the United States Steel Corporation (4). Several of the truss bridges in Georgia were constructed by one of the many nationally-known bridge companies.

With the availability of standardized parts, truss bridges reached their zenith of popularity as they could be erected easily and quickly. The fact that these bridges also could be disassembled and used at different locations made them a popular choice over other types of bridges constructed of wood or stone. However, by the second decade of the twentieth century, the introduction of reinforced concrete in the construction of bridges led to a decline in the construction of truss bridges. Given its strength and durability, reinforced concrete readily became the most popular material for the construction of the State's new bridges, such that between 1919 and 1922, the Georgia Highway Department constructed 255 new bridges throughout the State, 85 percent of which were of reinforced concrete construction (5).

Georgia DOT Bridge No. 321-00297X-00255N is one of only thirty seven remaining truss bridges in the State of Georgia, one of only twenty two remaining examples of the Warren Pony Truss type of bridge and the only remaining one of its kind in Worth County (6). This bridge is significant as one of Georgia's few remaining examples of a type of bridge that represents Georgia's early bridge building history.

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Endnotes:

- 1) Worth County Board of Commissioners, Meeting Minutes, September 24, 1924, p. 600.
- 2) Ibid, November 3, 1926, pp. 602-3.
- 3) Georgia Department of Transportation and Georgia Department of Natural Resources, <u>Historic Bridge Survey</u>, 1981, p. 13.
- 4) Ibid, pp. 14-5.
- 5) State Highway Board of Georgia, Fourth Annual Report of the State Highway Board of Georgia, 1922, p. 76.
- 6) Lichtenstein and Associates. <u>Historic Bridge Inventory Update</u>. "Historic Contexts: Bridge Building Technology in Georgia." Unpublished manuscript on file with the Georgia Department of Transportation's Office of Environment/Location, Atlanta, Georgia, 1997.